Special Contract Cont

UIC BRANCH EPA REGION 6

February 7, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 189

January 1 through January 31, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Received email correspondence from Richard Boice, USEPA, to ENVIRON, dated January 7, 2008, with an attached letter from IDEM regarding the Midco I Quarterly Report No. 6.
- Continued operation of the Midco I soil vapor extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collected the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on January 22, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| January | 1,270,258 | 2,352,242 | 3,622,500 |
| Year-to-Date | 1,270,258 | 2,352,242 | 3,622,500 |
| Total-to-Date | 132,917,143 | 193,449,457 | 326,366,600 |

| 33 | Annulus system fluid removals - | None |
|-----------|----------------------------------|------|
| 81 | Annulus system fluid additions - | None |
| 8 | Noncompliance occurrences - | None |

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and Midco II sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

The analytical results from the data validator for the October monthly effluent samples were received on January 18, 2008. The October analytical results were presented in the December 2007 monthly report. No additional analytical data were received from the data validator this month.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING FEBRUARY 2008

- Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.
- Continue operation of the Midco I SVE system.
- Continue operation of the Midco II SVE/AS system.

PERCENT OF COMPLETION OF THE RD/RA

| 20 | RD/RA Project Plans | 100% |
|------------|------------------------------------------------|-------------|
| 21 | Underground Injection Well Application Package | 100% |
| 192 | Investigation and Monitoring Activities | 100% |
| 顕 | Remedial Design of GWETS | 100% |
| 盔 | Remedial Action | see Table 3 |

PROBLEMS ENCOUNTERED AND THEIR SOLUTION

None.

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EPAREGION 6

March 7, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 190

February 1 through February 29, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collected the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on February 21, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| February | 1,332,940 | 2,138,760 | 3,471,700 |
| Year-to-Date | 2,603,198 | 4,491,002 | 7,094,200 |
| Total-to-Date | 134,250,083 | 195,588,217 | 329,838,300 |

April 9, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.J.

Subject: Progre

Progress Report No. 191

March 1 through March 31, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana RECEVED

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PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collected the annual influent and effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on March 12, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| March | 1,316,954 | 2,245,246 | 3,562,200 |
| Year-to-Date | 3,920,152 | 6,736,248 | 10,656,400 |
| Total-to-Date | 135,567,037 | 197,833,463 | 333,400,500 |

May 8, 2008

MAY 2 1 2008

UIC BRANCH EPA REGION 5

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 192

April 1 through April 30, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Submitted to the USEPA via email correspondence, dated April 11, 2008, the Midco II shallow ground water contour map.
- Received a letter from Richard Boice, USEPA, to Barbara Coughlin, ENVIRON, Re: Midco I and Midco II Summa Canister Sampling. Dated April 16, 2007.
- Submitted the Quarterly Operations, Maintenance, Monitoring, and Closure (OMM&C) Progress Report No. 7 for the Midco I Soil Vapor Extraction (SVE) system to the USEPA on April 22, 2008.
- Continued operation of the Midco I SVE system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collected the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on April 16, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.

Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| April | 1,299,779 | 2,129,021 | 3,428,800 |
| Year-to-Date | 5,219,931 | 8,865,269 | 14,085,200 |
| Total-to-Date | 136,866,816 | 199,962,484 | 336,829,300 |

Annulus system fluid removals - None
Annulus system fluid additions - None
Noncompliance occurrences - None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and Midco II sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of April.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING MAY 2008

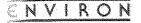
- Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.
- Continue operation of the Midco I SVE system.
- Continue operation of the Midco II SVE/AS system.

PERCENT OF COMPLETION OF THE RD/RA

| 25 | RD/RA Project Plans | 100% |
|----------|------------------------------------------------|-------------|
| 1 | Underground Injection Well Application Package | 100% |
| 齫 | Investigation and Monitoring Activities | 100% |
| 靈 | Remedial Design of GWETS | 100% |
| 523 | Remedial Action | see Table 3 |

PROBLEMS ENCOUNTERED AND THEIR SOLUTION

■ None.



10 2008

UIC BRANCH EPA REGION 5

June 10, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 193

May 1 through May 31, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Submitted the Quarterly Operations, Maintenance, Monitoring, and Closure (OMM&C) Progress Report No. 8 for the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system to the USEPA on May 23, 2008.
- Continued operation of the Midco I SVE system.
- Continued operation of the Midco II SVE/AS system.
- Collected the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on May 19, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.

Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| May | 1,327,383 | 2,376,617 | 3,704,000 |
| Year-to-Date | 6,547,314 | 11,241,886 | 17,789,200 |
| Total-to-Date | 138,194,199 | 202,339,101 | 340,533,300 |

Annulus system fluid removals Annulus system fluid additions None
 None
 None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I site had no non-GWETS-related shutdowns. The Midco II site had one non-GWETS-related shutdown. A power failure occurred on May 11, 2008 at 12:43 pm for 382 minutes.

SAMPLING AND TEST RESULTS

Analytical data for the march 2008 and April 2008 sampling events are presented in Tables 3 through 12. The validated reports for these samples have not been received from the data validator. Any significant data validation issues regarding the data presented in this report, if any, will be presented in a subsequent monthly report. The validated data reports for the December 2007 through February 2008 were received from the data validator on May 20, 2008. The data validation did not raise any significant issues with the data.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING JUNE 2008

- Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.
- Continue operation of the Midco I SVE system.
- Continue operation of the Midco II SVE/AS system.



RECEIVED

JUL 1 0 2008

UIC BRANCH EPA REGION 5

July 9, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 194

June 1 through June 30, 2008

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Submitted the Quarterly Operations, Maintenance, Monitoring, and Closure (OMM&C) Progress Report No. 8 for the Midco I Soil Vapor Extraction (SVE) system to the United States Environmental Protection Agency (USEPA) on June 2, 2008.
- Received an email transmittal from Richard Boice, USEPA to Barbara Coughlin, ENVIRON International Corporation (ENVIRON) on June 5, 2008 transmitting a comment letter from the Indiana Department of Environmental Management (IDEM) regarding the Midco I Quarterly OMM&C Progress Report No. 7.
- Submitted the Annual OMM&C Report No. 2 for the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system to the USEPA on June 23, 2008.
- Submitted a letter to Richard Boice, USEPA on June 24, 2008 regarding "Request to Shut Down the Thermal Oxidizer and Monitoring and Restart Procedures, Midco I Site, Gary, Indiana".
- Continued operation of the Midco I SVE system.
- Continued operation of the Midco II SVE/AS system.
- Collected the quarterly influent and effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on June 16, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| June | 295,192 | 362,008 | 657,200 |
| Year-to-Date | 6,842,506 | 11,603,894 | 18,446,400 |
| Total-to-Date | 138,489,391 | 202,701,109 | 341,190,500 |

Annulus system fluid removals Annulus system fluid additions Noncompliance occurrences None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and Midco II Sites had multiple non-GWETS-related shutdowns. Power failures and failures associated to the power outage occurred at Midco I on June 7, 2008 at 6:56 pm for 8,524 minutes, June 14, 2008 at 8:57 am for 568 minutes, June 14, 2008 at 8:43 pm for 577 minutes, June 15, 2008 at 3:15 pm for 1,090 minutes, June 17, 2008 at 2:29 am for 321 minutes, and on June 19, 2008 at 6:04 pm for 15,176 minutes. Power failures and failures associated to the power outage occurred at Midco II on June 7, 2008 at 6:56 pm for 7,964 minutes, June 13, 2008 at 10:26 am for 394 minutes, June 14, 2008 at 4:02 am for 898 minutes, June 14, 2008 at 8:43 pm for 777 minutes, June 15, 2008 at 1:52 pm for 1,459 minutes, June 17, 2008 at 2:29 am for 331 minutes, and on June 19, 2008 at 6:04 pm for 15,176 minutes.

SAMPLING AND TEST RESULTS

Analytical data for the May 2008 sampling events are presented in Tables 3 and 4. The data validation reports for these samples were received from the data validator on June 20, 2008.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

RECEIVED

August 7, 2008

AUG 1 1 2008

UIC BRANCH EPA REGION 5

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 195

July 1 through July 31, 2008

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collection of the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on July 17, 2008.
- Receipt of an email transmittal from Richard Boice, United States Environmental Protection Agency (USEPA) to Barbara Coughlin, ENVIRON International Corporation (ENVIRON) on July 22, 2008 transmitting a comment letter from the Indiana Department of Environmental Management (IDEM) regarding the Midco I Quarterly Operations, Maintenance, Monitoring, and Closure (OMM&C) Progress Report No. 8.
- Shut down of the Midco II Regenerative Thermal Oxidizer (RTO) on July 23, 2008.
- Submittal of the Annual OMM&C Report No. 2 for the Midco I SVE system to the USEPA on July 23, 2008.
- Submittal of the Quarterly OMM&C Progress Report No. 9 for the Midco I SVE system to the USEPA on July 29, 2008.
- Submittal of the Quarterly OMM&C Progress Report No. 9 for the Midco II SVE/AS system to the USEPA on July 29, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| July | 1,211,670 | 2,282,730 | 3,494,400 |
| Year-to-Date | 8,054,176 | 13,886,624 | 21,940,800 |
| Total-to-Date | 139,701,061 | 204,983,839 | 344,684,900 |

Annulus system fluid removals - None
 Annulus system fluid additions - None
 Noncompliance occurrences - None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I Site had one non-GWETS-related shutdown: a continuation of the transformer failure from the previous month that started June 30, 2008 at 7:00 am and lasted for 1,840 minutes. The Midco II Site had two non-GWETS-related shutdowns: (1) the continuation of the transformer failure from the previous month that started June 30, 2008 at 7:00 am and lasted for 1,875 minutes; and (2) a power failure on July 12, 2008 that started at 1:08 pm and lasted for 5 minutes.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of July.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING AUGUST 2008

Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.



RECEIVED

SEP 1 0 2008

UIC BRANCH EPA REGION 5

September 9, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 196

August 1 through August 31, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collected the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on August 14, 2008.
- Received a letter from Richard Boice, United States Environmental Protection Agency (USEPA) to Barbara Coughlin, ENVIRON International Corporation (ENVIRON) dated August 6, 2008 granting the request to shut down the thermal oxidizer (TO) at Midco I.
- Shut down the Midco I TO on August 13, 2008.
- Collected selected vapor monitoring point air samples at the Midco I and Midco II Sites on August 19 and 20, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.

Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| August | 1,280,004 | 2,194,596 | 3,474,600 |
| Year-to-Date | 9,334,180 | 16,081,220 | 25,415,400 |
| Total-to-Date | 140,981,065 | 207,178,435 | 348,159,500 |

Annulus system fluid removals Annulus system fluid additions None
 Noncompliance occurrences -

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I Site had no non-GWETS-related shutdowns. The Midco II Site had two non-GWETS-related shutdowns: (1) a power failure occurred on July 31, 2008 at 3:18 p.m. and lasted for 1,028 minutes; and (2) a power failure on August 4, 2008 that started at 8:27 p.m. and lasted for 678 minutes.

SAMPLING AND TEST RESULTS

Analytical data for the June and July 2008 sampling events are presented in Tables 3 through 12. The data validation reports for these samples were received from the data validator on August 8, 2008 and August 15, 2008, respectively.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING SEPTEMBER 2008

- Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.
- Continue operation of the Midco I SVE system.
- Continue operation of the Midco II SVE/AS system.



RECEIVED

OCT 14 2008

UIC BRANCH EPA REGION 5

October 8, 2008

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 197

September 1 through September 30, 2008

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Restarted the Midco I thermal oxidizer on September 9, 2008 at 8:40 a.m.
- Received an email transmittal from Richard Boice, United States Environmental Protection Agency (USEPA) to Barbara Coughlin, ENVIRON International Corporation (ENVIRON) on September 16, 2008 transmitting a comment letter from the Indiana Department of Environmental Management (IDEM) regarding the Midco I Quarterly Operations, Maintenance, Monitoring, and Closure (OMM&C) Progress Report No. 9 and the Midco II Quarterly OMM&C Progress Report No. 9.
- Collected the quarterly influent and effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on September 18, 2008.
- Submitted the Quarterly OMM&C Progress Report No. 10 for the Midco II SVE/AS system to the USEPA on September 29, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are

presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.

Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site | |
|---------------|--------------|---------------|----------------|--|
| September | 1,081,257 | 1,859,343 | 2,940,600 | |
| Year-to-Date | 10,415,437 | 17,940,563 | 28,356,000 | |
| Total-to-Date | 142,062,322 | 209,037,778 | 351,100,100 | |

Annulus system fluid removals - None
 Annulus system fluid additions - None
 Noncompliance occurrences - None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I Site had one non-GWETS-related shutdown. A shutdown occurred for the annual mechanical integrity testing (MIT) on September 26, 2008 at 7:59 a.m. for 5,701 minutes. The Midco II Site had two non-GWETS-related shutdowns. The shutdowns occurred for the annual MIT on September 25, 2008 at 9:14 a.m. for 54 minutes, and on September 25, 2008 at 10:17 a.m. for 7,003 minutes.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of September.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING OCTOBER 2008

- Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.
- Continue operation of the Midco I SVE system.
- Continue operation of the Midco II SVE/AS system.

ENVIRON

November 7, 2008

RECEIVED

NOV 10 2008

UIC BRANCH EPA REGION 5

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 198

October 1 through October 31, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Shut down of the Midco I Thermal Oxidizer (TO) on October 16, 2008.
- Collection of the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on October 16, 2008.
- Submission of the Midco I and II 2008 Annual Ground Water Monitoring Report to the USEPA on October 2, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.

Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| October | 1,254,753 | 2,224,047 | 3,478,800 |
| Year-to-Date | 11,670,190 | 20,164,610 | 31,834,800 |
| Total-to-Date | 143,317,075 | 211,261,825 | 354,578,900 |

Annulus system fluid removals -

None

Annulus system fluid additions -

None

Noncompliance occurrences -

None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I Site had two non-GWETS-related shutdowns. The continuation of the mechanical integrity testing (MIT) from the previous month occurred on September 30, 2008 at 7:00 a.m. for 35 minutes and at 10:20 a.m. for 130 minutes. The Midco II Site had one non-GWETS-related shutdown. The continuation of the MIT from the previous month occurred on September 30, 2008 at 7:00 a.m. for 1,544 minutes.

SAMPLING AND TEST RESULTS

Analytical data for the August 2008 sampling event are presented in Tables 3 and 4. The data validation report for these samples was received from the data validator on October 10, 2008.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING NOVEMBER 2008

- Continue operation of the Midco I and II Sites' GWETS and injection of treated ground water.
- Continue operation of the Midco I SVE system.
- Continue operation of the Midco II SVE/AS system.

ENVIRON

December 8, 2008

RECEIVED

DEC 09 2008

UIC BRANCH EPA REGION 5

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 199

November 1 through November 30, 2008

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Collection of the monthly effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on November 12, 2008.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| November | 875,492 | 1,449,008 | 2,324,500 |
| Year-to-Date | 12,545,682 | 21,613,618 | 34,159,300 |
| Total-to-Date | 144,192,567 | 212,710,833 | 356,903,400 |



January 8, 2009

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UIC BRANCH EPA REGION 5

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

Mary Ann Habeeb, State of Indiana

From:

Ronald E. Hutchens, P.E.

Subject:

Progress Report No. 200

December 1 through December 31, 2008 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued operation of the Midco I and II Sites' ground water extraction and treatment systems (GWETS) and injection of treated ground water.
- Continued operation of the Midco I Soil Vapor Extraction (SVE) system.
- Continued operation of the Midco II Soil Vapor Extraction/Air Sparge (SVE/AS) system.
- Receipt of a letter from Richard Boice, United States Environmental Protection Agency (USEPA) to Barbara Coughlin, ENVIRON International Corporation (ENVIRON) dated December 1, 2008. Re: Midco I and Midco II confirmatory soil sampling, and post groundwater treatment monitoring. The requests to install replacement vapor monitoring points, as necessary, at Midco II and to discontinue monthly monitoring of polyaromatic hydrocarbons (PAHs) in the Midco I effluent were approved.
- Collection of the quarterly influent and effluent samples from the Midco I and II Sites' ground water treatment systems (GWTS) on December 17, 2008.
- Receipt of an email transmittal from Richard Boice, USEPA, to Ron Hutchens and Barbara Coughlin, ENVIRON, dated December 18, 2008, transmitting two comment letters from the Indiana Department of Environmental Management (IDEM). The first letter was dated December 12, 2008 regarding the 2008 Annual Groundwater Monitoring Report. The second letter was dated December 18, 2008 regarding the Midco II Quarterly Operations, Maintenance, Monitoring, and Closure (OMM&C) Progress Report No. 10.

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MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and Midco II Sites' GWTS are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected:

| | Midco I Site | Midco II Site | Deep Well Site |
|---------------|--------------|---------------|----------------|
| December | 1,088,008 | 1,457,992 | 2,546,000 |
| Year-to-Date | 13,633,690 | 23,071,610 | 36,705,300 |
| Total-to-Date | 145,280,575 | 214,168,825 | 359,449,400 |

Annulus system fluid removals - None

Annulus system fluid additions - None

Noncompliance occurrences - None

SYSTEM SHUTDOWNS

- Details of the Midco I and Midco II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I Site had three non-GWETS-related shutdowns. Power failures occurred on December 9, 2008 at 11:30 p.m. for 630 minutes; on December 14, 2008 at 9:10 a.m. for 1,490 minutes; and on December 19, 2008 at 6:26 a.m. for 2,989 minutes. The Midco II Site had seven non-GWETS-related shutdowns. Power failures occurred on December 9, 2008 at 11:30 p.m. for 630 minutes; on December 13, 2008 at 2:09 p.m. for 2,691 minutes; on December 19, 2008 at 6:30 a.m. for 3,120 minutes; on December 27, 2008 at 4:42 a.m. for 303 minutes; on December 27, 2008 at 10:32 a.m. for 8 minutes; on December 27, 2008 at 1:45 p.m. for 90 minutes; and on December 28, 2008 at 4:42 a.m. for 208 minutes.

SAMPLING AND TEST RESULTS

Analytical data for the November 2008 sampling event are presented in Tables 3 and 4. The data validation reports for these samples were received from the data validator on December 18, 2008. In the November 2008 sample, the trichloroethene (TCE) concentration in the Midco I effluent was 33 micrograms per liter (ug/L), which is above the maximum allowable concentration (MAC) of 31.5 ug/L. TCE was not detected in the Midco II effluent at a detection limit of 8.3 ug/L and the TCE concentration was12 ug/L in the combined effluent. The volatile organic compound (VOC) analytical data for the December 2008 sampling event are presented in Table 5. In the December 2008 sampling event, the TCE concentrations in the Midco I influent (24 ug/L and 25 ug/L field duplicate) and effluent (14 ug/L) were below the MAC of 31.5 ug/L. TCE

¹ The validated data for the December 2008 quarterly sampling event will be presented in a subsequent monthly report.